performance. SDS sedimentation volumes averaged approximately 50% that of HRWW of similar flour protein concentrations; gluten strength, as measured by the Mixograph, was markedly reduced, equivalent to that of Chinese Spring. Loss of quality is a direct consequence of the presence of the Glu-D1 null-allele from Nap Hal.

The following were collected by D.R. Dewey, USDA-ARS, Forage and Range Research Laboratory, Utah State University, UMC-63, Logan, Utah 84322, United States; Kevin B. Jensen, USDA, ARS, Utah State University, Crops Research Laboratory, Logan, Utah 84322-6300, United States. Received 01/16/1992.

PI 591821. Hordeum jubatum L.
Wild. DJ-4011; W6 10405. Collected 08/16/1989 in Russian Federation. Elevation 900 m. Heavily grazed valley. Near the 681km marker on Highway M-52 (15km S of Cheketeman camp) toward Aktash and parallel to the Katun River (Gorno Altay A.O.). Siberia. Awnless.

PI 591822. Hordeum jubatum L.
Wild. DJ-4024; W6 10407. Collected 08/19/1989 in Russian Federation. Elevation 1140 m. On a dry, rocky slope off a secondary gravel road. In the vicinity of the Tuetka camp, about 37km W of Tuetka, Gorno Altay A.O. Siberia. Awnless to mucronate.

The following were developed by Laura Oberthur, Montana State University, Dept. of Plant & Soil Sciences, Bozeman, Montana 59717-0002, United States; G.D. Kushnak, Western Triangle Agric. Research Center, P.O. Box 1474, Conrad, Montana 59425, United States; Patrick F. Hensleigh, Montana State University, Dept. of Plant & Soil Sciences, Bozeman, Montana 59717-0002, United States; Thomas K. Blake, Montana State University, Dept. of Plant, Soil, & Environmental Sciences, Bozeman, Montana 59717, United States; E.A. Hockett, USDA, ARS, Montana State University, Plant and Soil Science Department, Bozeman, Montana 59717, United States; G.R. Carlson, Montana Agric. Exp. Station, Northern Agric. Research Center, Havre, Montana 59501, United States ; J.L. Eckhoff, Montana Agric. Exp. Station, Eastern Agric. Research Center, Sidney, Montana 59270, United States; D.W. Wichman, Montana Agric. Exp. Station, Central Agric. Exp. Station, Moccasin, Montana, United States; Kenneth M. Gilbertson, USDA-ARS, Montana State University, Bozeman, Montana, United States; H.F. Bowman, Montana State University, Dept. of Plant, Soil & Environmental Sciences, Bozeman, Montana 59717, United States. Received 08/30/1995.

PI 591823. Hordeum vulgare L. **ssp. vulgare**
Cultivar. Pureline. "CHINOOK". CV-257. Pedigree - F18 single plant selection from Hector/Klages. Two-row, white kernel, midseason, full stature. Spikes mid-long, midlax, seminodding before maturity and nod at maturity. Spike awns rough. Glume awns equal in length to hair-covered glume. Kernels hulls adhering, finely wrinkled. Rachillas have long hairs. Higher yielding than Klages or Hector. Susceptible to effects of Russian wheat aphid (Diuraphis noxia), and shows limited tolerance to scald and net blotch.

The following were developed by Ken P. Vogel, USDA, ARS, University of Nebraska, Dept. of Agronomy, Lincoln, Nebraska 68583-0937, United States. Received 10/12/1995.

PI 591824. Panicum virgatum L.
Cultivar. Population. "SHAWNEE". Pedigree - One cycle of restricted, stratified, mass selection for forage yield and in vitro dry matter digestibility from Cave-in-Rock switchgrass. Upland, octaploid switchgrass. Improved forage quality as measured by in vitro dry matter digestibility (IVDMD) in comparison to Cave-in-Rock and improved forage